

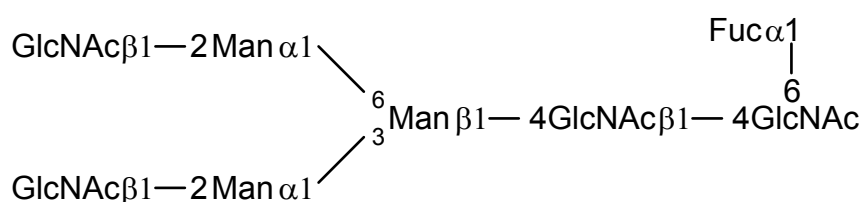
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## NGA2F Glycan

Cat. No. CN-NGA2F-x (where x denotes pack size)

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### Structure



**Synonyms :** NGA2F N-linked oligosaccharide.

**Description:** Asialo-, agalacto-, core-fucosylated bi-antennary complex-type N-glycan (oligosaccharide). NGA2F is the agalacto- substructure of NA2F glycan.

**Sources :** NGA2F glycan is found on many mammalian glycoproteins including human IgG and is a substructure of bi-antennary N-linked oligosaccharides such as A2F, A1F, and NA2F which are widely found on glycoproteins. This product is typically purified from the oligosaccharide pool released from porcine thyroglobulin by hydrazinolysis using a combination of HPLC and glycosidase digestion.

**Form:** Dry. Dried by centrifugal evaporation from an aqueous solution.

**Molecular Weight:** 1463

**Purity:** > 90% pure as assessed by a combination of <sup>1</sup>H-NMR and HPLC.

**Storage:** Refrigerate (-20°C) both before and after dissolution. This product is stable for at least 5 years as supplied.

**Shipping:** The product can be shipped at ambient when dry. After dissolution, ship on dry ice.

**Handling:** Allow the unopened vial to reach ambient temperature and tap unopened on a solid surface to ensure that most of the lyophilized material is at the bottom of the vial. Gently remove the cap, add the desired volume of reconstitution medium, re-cap and

mix thoroughly to bring all the oligosaccharide into solution. For maximal recovery of oligosaccharide, ensure that the cap lining is also rinsed and centrifuge the reconstituted vial briefly before use. Ensure that any glass, plasticware or solvents used are free of glycosidases and environmental carbohydrates.

**Safety:** This product is non-hazardous and has been purified from natural sources certified to be free of all hazardous material including pathogenic biological agents.

**For research use only. Not for human or drug use**

## Related Products

<b>Ludger Cat. No.</b>	<b>Description</b>
CN-A2F-x	A2F Glycan (di-sialylated parent of NA2F glycan)
CN-A1F-x	A1F Glycan (mono-sialylated parent of NA2F glycan)
CN-NA2F-x	NA2F Glycan (di-galactosylated parent of NGA2F glycan)
CN-M3N2F-x	M3N2F Glycan (a substructure of NGA2F glycan)

## Warranties and liabilities

Ludger warrants that the above product conforms to the attached analytical documents. Should the product fail for reasons other than through misuse Ludger will, at its option, replace free of charge or refund the purchase price. This warranty is exclusive and Ludger makes no other warrants, expressed or implied, including any implied conditions or warranties of merchantability or fitness for any particular purpose. Ludger shall not be liable for any incidental, consequential or contingent damages.

This product is intended for *in vitro* research only.

Document # 'CN-NGA2F-Guide', revision # 2.1

# Ludger™

## Certificate of Analysis

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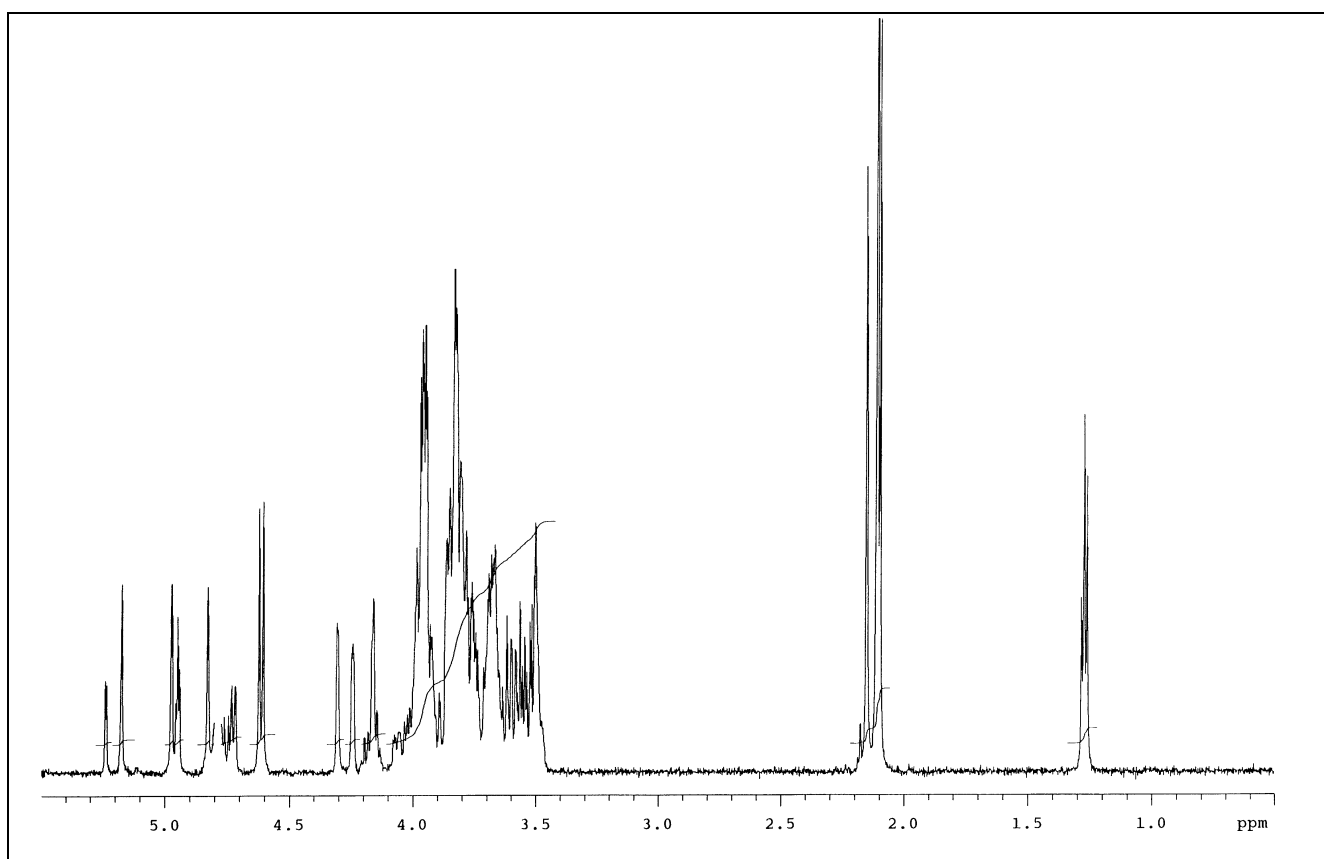
### NGA2F Glycan

Cat. #s: CN-NGA2F-10U (10 µg) and CN-NGA2F-20U (20µg)

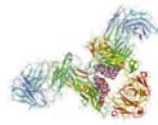
Lot # : A58Q-01

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**Purity:** > 90% pure as assessed by a combination of  $^1\text{H-NMR}$  (see Fig 1) and HPLC.



**Figure 1 : 500 MHz  $^1\text{H-NMR}$  of NGA2F Glycan (Cat. No.CN-NGA2F-10U, Lot No.A58Q-01)**



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## Certificate of Analysis

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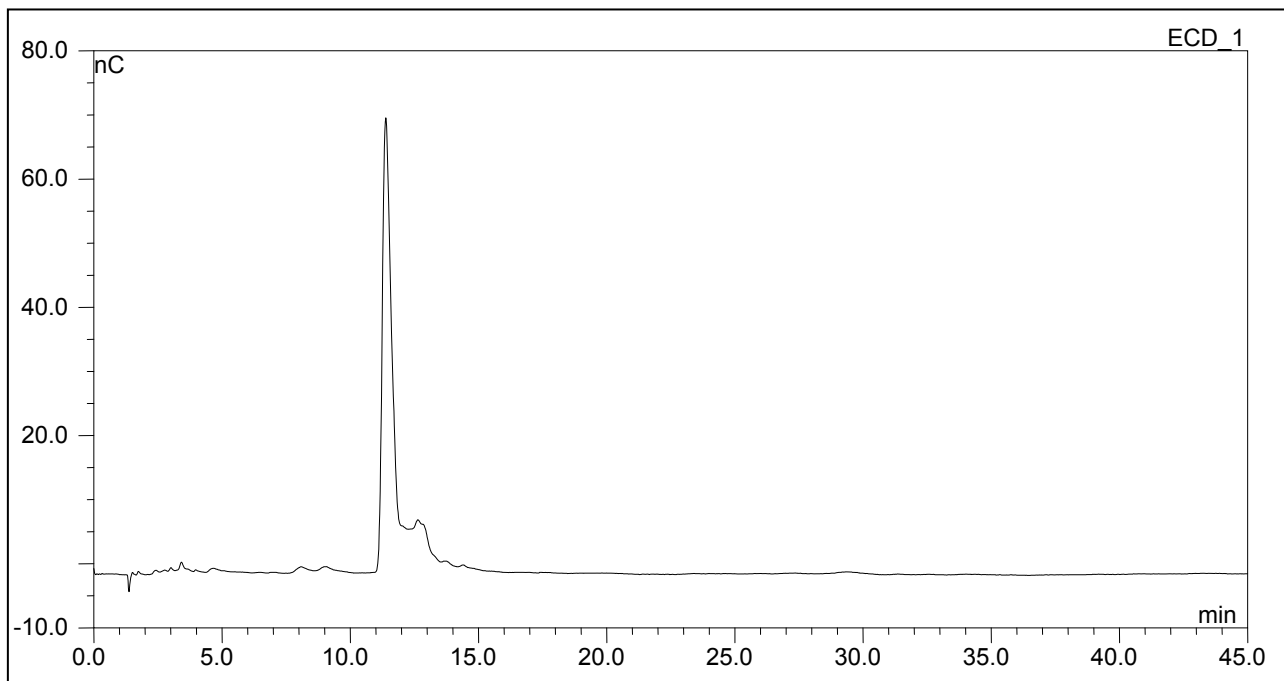
### NGA2F Glycan

Cat. #s: CN-NGA2F-10U (10 µg) and CN-NGA2F-20U (20µg)

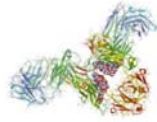
Lot # : A77Q-02

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**Purity:** > 95% pure as assessed by HPLC (see Fig 1).



**Figure 1 : HPAE-PAD HPLC Profile of NGA2F Glycan (Cat. No.CN-NGA2F-10U, Lot No. A77Q-02)**



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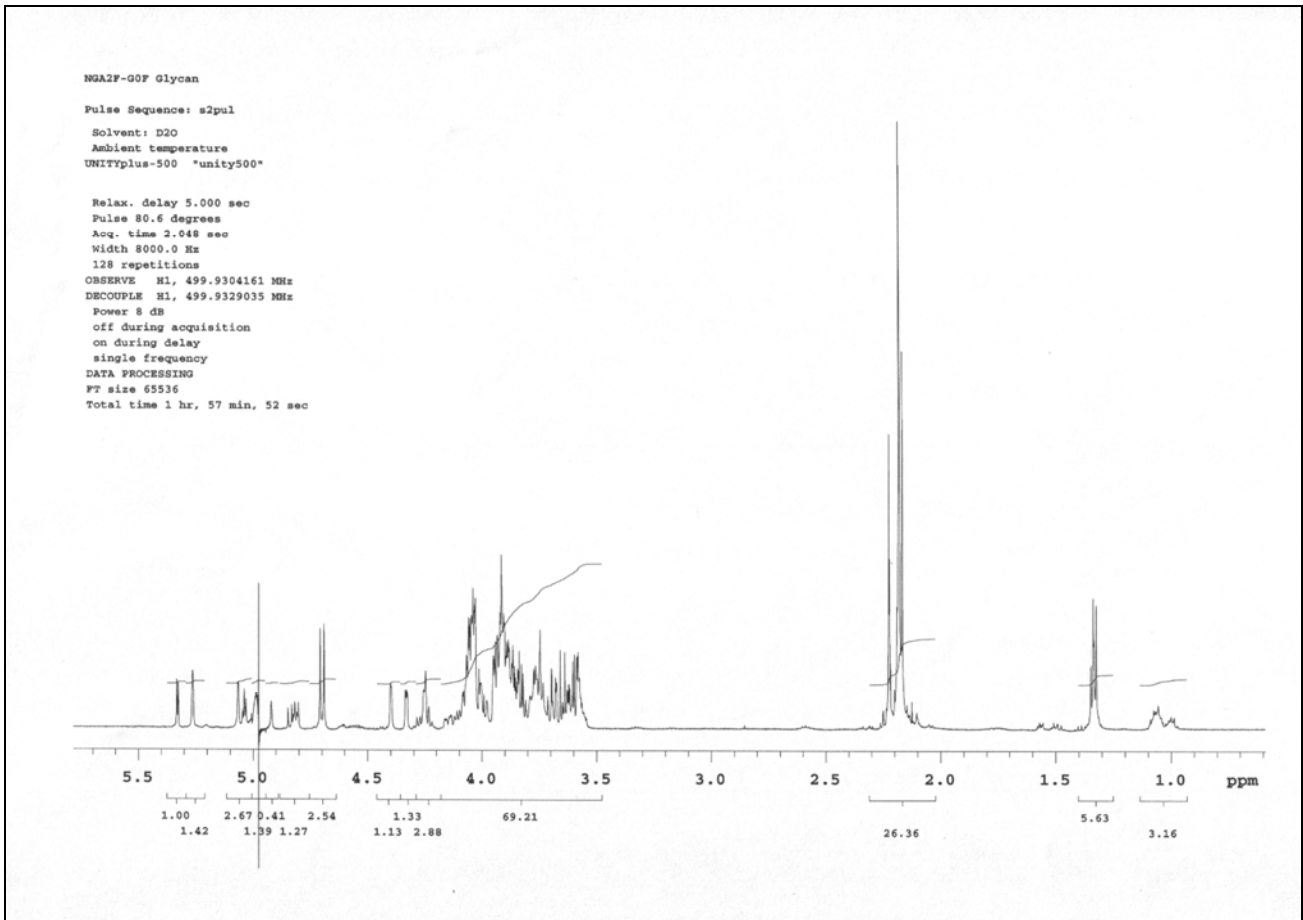
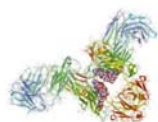
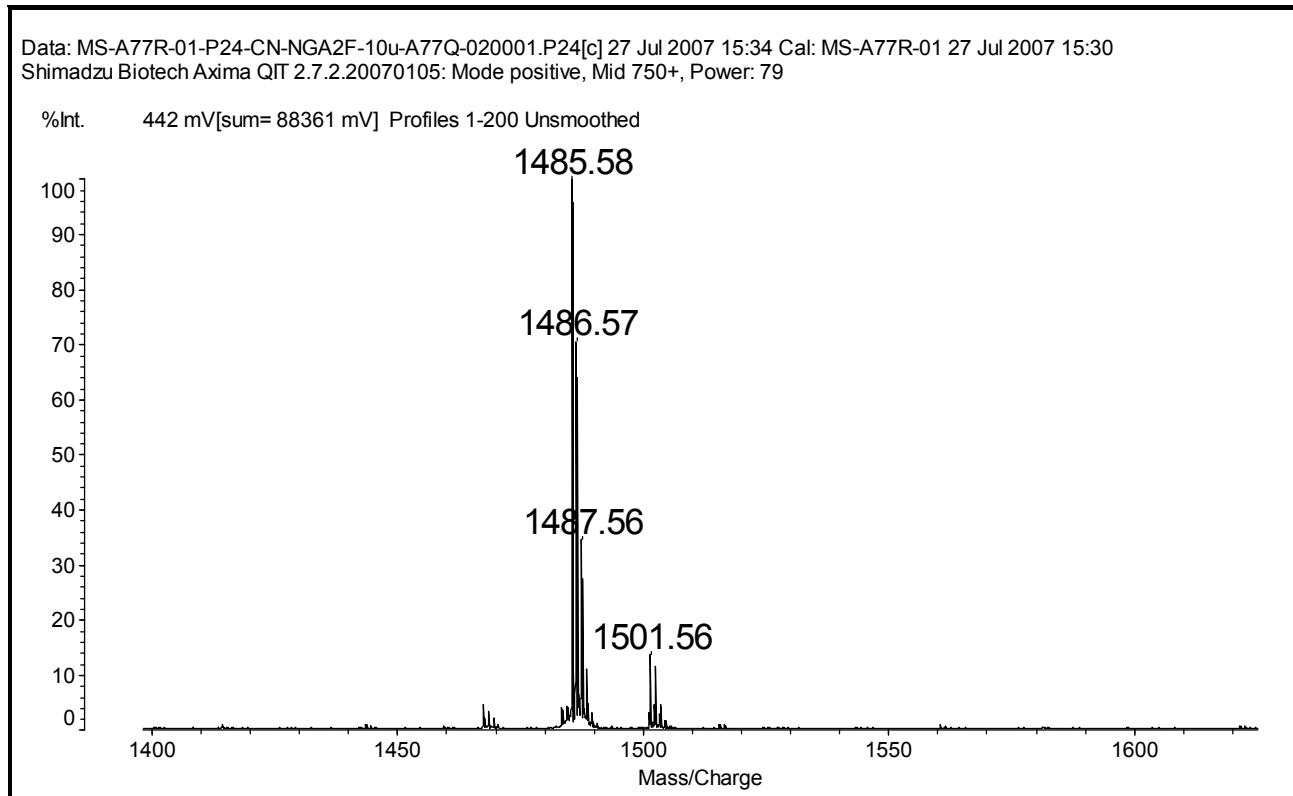


Figure 2 : 500 MHz <sup>1</sup>H-NMR of NGA2F Glycan (Cat. No.CN-NGA2F-10U, Lot No. A77Q-02)



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**Figure 3 : Shimadzu Axima-QIT mass spectrometer spectrum of NGA2F Glycan (Cat. No.CN-NGA2F-10U, Lot No. A77Q-02). Theoretical mass 1485.53 Da  $[M+Na]^+$ , 1501.51 Da  $[M+K]^+$ .**